THE ASTROPHYSICAL JOURNAL LETTERS

CONTENTS OF VOLUME 557, PART 2

2001 AUGUST 10, NUMBER 1

	Page
DETERMINING COSMIC MICROWAVE BACKGROUND STRUCTURE FROM ITS PEAK DISTRIBUTION *A. Kashlinsky, C. Hernández-Monteagudo, and F. Atrio-Barandela*	L1
MEASURING ANGULAR DIAMETER DISTANCES THROUGH HALO CLUSTERING Ⓔ *Asantha Cooray, Wayne Hu, Dragan Huterer, and Michael Joffre*	L7
THE MEAN PAIRWISE PECULIAR VELOCITY IN COSMOLOGICAL *N*-BODY SIMULATIONS: TIME VARIATION, SCALE DEPENDENCE, AND THE STABLE CONDITION *Toshiyuki Fukushige and Yasushi Suto*	L11
THERMAL COMPTONIZATION AND DISK THERMAL REPROCESSING IN NGC 3516 *James Chiang and Omer Blaes*	L15
POTENTIAL FORMATION SITES OF SUPER–STAR CLUSTERS IN ULTRALUMINOUS INFRARED GALAXIES *Kenji Bekki and Warrick J. Couch*	L19
NONEQUILIBRIUM IONIZATION STATES OF GAMMA-RAY BURST ENVIRONMENTS *Daisuke Yonetoku, Toshio Murakami, Kuniaki Masai, Atsumasa Yoshida, Nobuyuki Kawai, and Masaaki Namiki*	L23
A POSSIBLE EMISSION FEATURE IN AN X-RAY AFTERGLOW OF GRB 970828 AS A RADIATIVE RECOMBINATION EDGE *A. Yoshida, M. Namiki, D. Yonetoku, T. Murakami, C. Otani, N. Kawai, Y. Ueda, R. Shibata, and S. Uno*	L27
INFRARED SURFACE BRIGHTNESS FLUCTUATIONS OF THE COMA ELLIPTICAL GALAXY NGC 4874 AND THE VALUE OF THE HUBBLE CONSTANT *Michael C. Liu and James R. Graham*	L31
THE X-RAY GLOBULAR CLUSTER POPULATION IN NGC 1399 *Lorella Angelini, Michael Loewenstein, and Richard F. Mushotzky*	L35
A NEW FORMATION MODEL FOR M32: A THRESHED EARLY-TYPE SPIRAL GALAXY? *Kenji Bekki, Warrick J. Couch, Michael J. Drinkwater, and Michael D. Gregg*	L39
SULPHUR ABUNDANCE IN VERY METAL-POOR STARS *Garik Israelian and Rafael Rebolo*	L43
UPPER LIMITS ON O VI EMISSION FROM *VOYAGER* OBSERVATIONS *Jayant Murthy, R. C. Henry, R. L. Shelton, and J. B. Holberg*	L47
PSR J1016−5857: A YOUNG RADIO PULSAR WITH POSSIBLE SUPERNOVA REMNANT, X-RAY, AND GAMMA-RAY ASSOCIATIONS *F. Camilo, J. F. Bell, R. N. Manchester, A. G. Lyne, A. Possenti, M. Kramer, V. M. Kaspi, I. H. Stairs, N. D'Amico, G. Hobbs, E. V. Gotthelf, and B. M. Gaensler*	L51
OPTICAL DETECTION OF A VARIABLE MILLISECOND PULSAR COMPANION IN 47 TUCANAE *Peter D. Edmonds, Ronald L. Gilliland, Craig O. Heinke, Jonathan E. Grindlay, and Fernando Camilo*	L57
PULSAR SPIN-DOWN BY A FALLBACK DISK AND THE P-$\dot{P}$ DIAGRAM *M. Ali Alpar, Aşkin Ankay, and Efe Yazgan*	L61
IS β PICTORIS AN ACTIVE STAR? *M. Deleuil, J.-C. Bouret, A. Lecavelier des Etangs, A. Roberge, A. Vidal-Madjar, M. André, W. P. Blair, P. D. Feldman, R. Ferlet, S. D. Friedman, and H. W. Moos*	L67
ELECTRIC CURRENT AND MAGNETIC SHEAR IN SOLAR ACTIVE REGIONS *Hongqi Zhang*	L71
DIAGNOSTIC UTILITY OF THE RELATIVE INTENSITY OF 3C TO 3D IN Fe XVII *G. V. Brown, P. Beiersdorfer, H. Chen, M. H. Chen, and K. J. Reed*	L75
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	*Inside Back Cover*
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	*Back Cover*

CONTENTS

2001 AUGUST 20, NUMBER 2

	Page
MAPPING THE DARK MATTER THROUGH THE COSMIC MICROWAVE BACKGROUND DAMPING TAIL *Wayne Hu*	L79
FOURIER ANALYSIS OF GAMMA-RAY BURST LIGHT CURVES: SEARCHING FOR A DIRECT SIGNATURE OF COSMOLOGICAL TIME DILATION *Heon-Young Chang*	L85
DISCOVERY OF A GALAXY CLUSTER VIA WEAK LENSING *D. Wittman, J. A. Tyson, V. E. Margoniner, J. G. Cohen, and I. P. Dell'Antonio*	L89
GIANT PULSES FROM THE MILLISECOND PULSAR B1821−24 *Roger W. Romani and Simon Johnston*	L93
OBSERVATIONS OF THE OPTICAL COUNTERPART TO XTE J1118+480 DURING OUTBURST BY THE ROBOTIC OPTICAL TRANSIENT SEARCH EXPERIMENT I TELESCOPE Ⓔ *J. Wren, C. Akerlof, R. Balsano, J. Bloch, K. Borozdin, D. Casperson, G. Gisler, R. Kehoe, B. C. Lee, S. Marshall, T. McKay, W. Priedhorsky, E. Rykoff, D. Smith, S. Trudolyubov, and W. T. Vestrand*	L97
HIGH-RESOLUTION X-RAY SPECTROSCOPY OF THE ACCRETION DISK CORONA SOURCE 4U 1822−37 *Jean Cottam, Masao Sako, Steven M. Kahn, Frits Paerels, and Duane A. Liedahl*	L101
DETECTION OF IONIZED GAS IN THE GLOBULAR CLUSTER 47 TUCANAE *P. C. Freire, M. Kramer, A. G. Lyne, F. Camilo, R. N. Manchester, and N. D'Amico*	L105
EVIDENCE FOR A BINARY SYSTEM AT THE CORE OF THE BIPOLAR PROTO–PLANETARY NEBULA OH 231.8+4.2 *Yolanda Gómez and Luis F. Rodríguez*	L109
WATER VAPOR IN CARBON-RICH ASYMPTOTIC GIANT BRANCH STARS FROM THE VAPORIZATION OF ICY ORBITING BODIES *K. E. Saavik Ford and David A. Neufeld*	L113
WESTBROOK'S MOLECULAR GUN: DISCOVERY OF NEAR-INFRARED MICROSTRUCTURES IN AFGL 618 *Toshiya Ueta, David Fong, and Margaret Meixner*	L117
THE TEMPERATURE DISTRIBUTION IN TURBULENT INTERSTELLAR GAS *A. Gazol, E. Vázquez-Semadeni, F. J. Sánchez-Salcedo, and J. Scalo*	L121
SOLAR HARD X-RAY BURSTS AND ELECTRON ACCELERATION DOWN TO 8 keV *R. P. Lin, P. T. Feffer, and R. A. Schwartz*	L125
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	*Inside Back Cover*
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	*Back Cover*